

AMENDMENTS TO THE DRAWINGS

The two new sheets of drawings appended hereto are in response to the examiner's requirement for drawings showing the gears that provide the displacement unit referred to in the claims, and showing a longitudinal view of the gears, pressure plate, axial plate, and spacer. Neither of the new drawing sheets introduces new matter because each is based upon disclosures contained in either or all of the specification, the claims, and the drawings as originally filed.

Acceptance and entry of the attached new drawing sheets is respectfully requested.

REMARKS

Claims 1 and 12 have been amended in response to the examiner's objection to the drawings.

The drawings were objected to on the ground they did not show every feature of the invention set forth in the claims. The attached new drawing sheets showing new Figures 1a and 1b respond to the examiner's objection. In that regard, the first and second gears recited in claim 10 are shown in each of the new drawing figures in the form of ring gear 60 and pinion 62; the supply chamber recited in original claim 1 has been amended to "receiving chamber," which is identified in originally-filed Figure 1 as element 5; and the spring element recited in original claim 12 in connection with the spacer element has been deleted and the term "resilient" has been inserted to recite a characteristic of the spacer element, which is shown in each of Figures 2 and 3. Additionally, new Figure 1b provides the longitudinal view that was required by the examiner. Accordingly, it is believed that the new drawing figures and the amendments to the claims serve to overcome the examiner's objection to the drawings.

Claims 1 through 9, 11, and 13 were rejected as anticipated by the Wong et al. '796 reference. The Wong et al. reference does not show the invention as claimed and it therefore does not anticipate the claims. Further, the Wong et al. reference is directed to a different problem. Whereas the present invention is directed to reducing noise generated while a pump is in operation (see specification, paragraphs [0002] and [0003]), the Wong et al. reference is directed to improving the volumetric efficiency of a pump (see Wong et al., col. 1,

lines 30 through 33; and col. 5, lines 36 through 41). Thus, one faced with a pump noise problem would not be led for a solution to that problem to a disclosure directed to improving pump volumetric efficiency.

In addition to being directed to a different problem, it should also be noted that the Wong et al. reference relates to a different pump structure from that to which the present invention is directed. The Wong et al. reference involves a vane pump whereas the present invention involves a gear pump. Consequently, the structural elements of the vane pump disclosed in the Wong et al. reference are significantly different from the structural elements of the present invention. Again, because of the different structural features of vane pumps and gear pumps one faced with a gear pump noise problem would not be led to the vane pump art for a solution to that problem.

The examiner construed the Wong et al. reference as disclosing “a pressure plate (34) positioned between the pressure chamber 70 and the housing 22.” But that construction of the reference does not conform with the actual Wong et al. disclosure. Element 34 of Wong et al. is not a pressure plate – it is identified in the reference as a disk-shaped cover. Instead of element 34, the pressure plate identified in the Wong et al. reference is element 44. And the examiner later referred to element 44 as an axial plate, not a pressure plate as identified in the Wong et al. reference.

The examiner maintained that pressure plate 34 “is uncoupled from the housing by at least one spacer element (40, 68).” But element 40 is a sealing ring and element 68 is a retaining ring. Neither of those elements is a spacer

element. Further, plate 34 is mechanically coupled to housing 12 by virtue of retaining ring 68, which is a rigid metallic ring in order to provide a retention function. Additionally, retaining ring 68 is not cross-hatched to represent a resilient member, and because it must be a rigid element to retain cover 34 it directly mechanically couples what the examiner has referred to as a pressure plate to the surrounding housing structure. Instead of being a spacer, that uncouples a pressure plate from a housing, as claimed in claim 1, retaining ring 68 of the Wong et al. reference is a coupling element that couples together housing 12 with so-called pressure plate 34. The claimed invention is thus not disclosed in the Wong et al. reference, and it therefore is not anticipated by that reference.

Additionally, that the Wong et al. reference does not even suggest uncoupling a pressure plate from a housing is reflected in Wong et al. at col. 2, lines 51 through 56. In that passage the reference teaches away from the present invention in that it discloses directly and tightly contacting the respective inner elements of the pump together between cover 34 and surface 18 of counterbore 20. Accordingly, in addition to not anticipating the claimed invention, the Wong et al. reference also does not render it obvious.

Claims 2 through 9, 11, and 13 each depend from claim 1, either directly or indirectly, and therefore those claims are also distinguishable over the references relied upon, and for the same reasons as are given above in connection with claim 1. Further, each of the dependent claims recites additional subject matter that together with the subject matter claimed in claim 1 further

distinguishes the inventions so claimed from the teachings of the references relied upon.

Claim 10 was rejected as obvious based upon the Wong et al. reference taken together with the Parrett '383 reference. The Parrett reference was cited to show a gear pump. However, as was the case with the Wong et al. reference the Parrett reference also does not relate to or discuss noise generated in a gear pump or methods to reduce noise. Further, the Parrett reference also does not teach or suggest a spacer element, and the plates shown in that reference are part of a structure in which the respective elements are not uncoupled from each other but are in direct contact with each other. Clearly, neither of the Wong et al. nor Parrett references, nor their combination, discloses or suggests the claimed invention.

Additionally, because the Wong et al. and Parrett references are directed to different pump structures, it is not apparent just how they could or should be combined. The references contain no suggestion or motivation for one to combine them as the examiner has done. It is not enough that disclosures could theoretically be combined in some way. The mere fact of possible combination does not make obvious the combination of particular elements of the references. In that regard, all inventions are combinations of old elements. But to be properly combinable the references must suggest the claimed combination itself, not merely disclose individual elements or components that make up the combination, because it is the specific combination of particular elements in a particular way, and not the mere existence of those elements, that must suggest

the invention.

As noted above, neither of the references relied upon by the examiner teaches the invention as herein claimed, and each of the references relates to a different structure and than those to which the present claims are directed. Moreover, the references do not contain any hint as to just how they could be combined to arrive at the present invention as claimed. In that regard, it is not apparent from the references which features of which reference are to be combined with which features of the other reference, and which features of which reference are to be discarded to arrive at a particular combination of features. Accordingly, the only motivation for combining the references in the manner the examiner has done is the disclosure of the present application. But to use as a road map or as a template an inventor's disclosure to aid in picking and choosing particular parts of particular references that allegedly can be combined, in order to render obvious that which only the inventor has taught, is an improper basis for rejection.

Claim 12 was rejected as obvious based upon the Wong et al. reference and "design choice." In that regard, claim 12 has been amended to recite a resilient element rather than a spring element. Further, because claim 12 also depends from claim 1, the distinctions noted above relative to the Wong et al. reference and claim 1 apply with equal effect to claim 12.

Based upon the foregoing amendments and remarks, the claims as they now stand in the application are believed clearly to be in allowable form in that they patentably distinguish over the disclosures contained in the references that

were cited and relied upon by the examiner, whether those references be considered in the context of 35 U.S.C. § 102 or of 35 U.S.C. § 103. Consequently, this application is believed to be in condition for allowance, and reconsideration and reexamination of the application is respectfully requested with a view toward the issuance of an early Notice of Allowance.

The examiner is cordially invited to telephone the undersigned attorney if this amendment raises any questions, so that any such question can be quickly resolved in order that the present application can proceed toward allowance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Alfred J. Mangels', with a long horizontal flourish extending to the right.

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Attachments: Two new drawing sheets showing new Figures 1a and 1b.